Preliminary FY 21 Groundwater Production Charge Analysis Continued... January 28, 2020





Board Member Comments on Jan 14, 2020

- Show scenario that incorporates investment in Los Vaqueros
- Assume success in achieving WIIN funds for Pacheco Reservoir Expansion or...
 - Replacement funding via partnerships or other grant monies
- Support for \$200/AF Treated Water Surcharge
- Discuss Purified Water Program with Recycled Water Committee

Comments from Recycled Water Committee on Jan 21, 2020

- Suggested Scenarios
 - Full suite of potential Purified Water Program Investments (PA/MV, Sunnyvale, City of San Jose, South County)
 - Reduced Program (PA/MV only)
 - Reduced Program plus \$200M placeholder for potential additional investments
- Support for Direct Potable Reuse (DPR)
- Little support for building WTP & delaying conveyance system to beyond FY 30
- Little support for assuming State Resiliency Program Grant funding



Board: Near-Term Water Supply Project Decisions



April

Delta Conveyance:

May expand SWP

commitment to replicate

CVP participation

Mav

Sites Reservoir Project:

Commit funds to continue participation



July

Sites Reservoir Project:

May adjust level of participation



December

Los Vaqueros:

Define role and financial commitment to optimize benefits



March

MILESTONES

PPORTUNITIES

Investment Scenarios

1) Baseline: WSMP 80% Level Of Service

- Baseline Projects*
 - Almaden Valley Pipeline Replacement
 - Land Rights South County RW Pipeline
 - SCADA, WTP, Distr. Sys. Implementation
- Delta Conveyance (State side)
 - Paid for by water charges, not SWP Tax
- ▶ Delta Conveyance (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$10M in FY 21 growing to \$20M by FY 28
- Pacheco Reservoir
 - \$250M WIIN funding + WIFIA loan
 - ▶ Partner Agencies pay 20% of project
- Transfer-Bethany Pipeline
- South County Recharge
 - ► Timing = beyond FY 30
- \$200M warranty placeholder for dams & WTP's

3) Baseline, No WIIN + Revised Purified Wtr

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4) Baseline, No WIIN + Revised PW + CVP

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5) Baseline + Revised PW + CVP side

- Baseline Projects*
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Exceeds 80% LOS goal

Exceeds 80% LOS goal



Investment Scenarios

6) Baseline + Revised PW + CVP + LVE

- Baseline Projects*
 - ▶ Almaden Valley Pipeline Replacement
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 - Paid for by water charges, not SWP Tax
- ▶ Delta Conveyance (CVP side)
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 - Partner Agencies pay 20% of project
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- South County Recharge
 - ► Timing = beyond FY 30
- \$200M warranty placeholder for dams & WTP's

Exceeds 80% LOS goal

7) Baseline, Revised PW + CVP + \$200M

- Baseline Projects*
 - Almaden Valley Pipeline Replacement
 - Land Rights South County RW Pipeline
 - ▶ SCADA, WTP, Distr. Sys. Implementation
- Delta Conveyance (State side)
 - Paid for by water charges, not SWP Tax
- Delta Conveyance (CVP side)
- No Regrets Package
- Potable Reuse Palo Alto Agreement to produce13KAF by FY 30
 - Based on \$614M IPR capital project, District builds, finances and operates (Not a P3)
 - ▶ P3 reserve at \$10M in FY 21 growing to \$20M by FY 28
- \$200M IPR Placeholder for North County for new water supply by FY 30
- Pacheco Reservoir
 - ▶ \$250M WIIN funding + WIFIA loan
 - Partner Agencies pay 20% of project
- ► Transfer-Bethany Pipeline + LVE
- South County Recharge
 - ► Timing = beyond FY 30
- \$200M warranty placeholder for dams & WTP's

8) Baseline, Revised PW + CVP + \$650M

- Baseline Projects*
 - Almaden Valley Pipeline Replacement
 - Land Rights South County RW Pipeline
 - SCADA, WTP, Distr. Sys. Implementation
- ▶ Delta Conveyance (State side)
 - Paid for by water charges, not SWP Tax
- Delta Conveyance (CVP side)
- No Regrets Package
- Potable Reuse Palo Alto Agreement to produce13KAF by FY 30
 - Based on \$614M IPR capital project, District builds, finances and operates (Not a P3) P3 reserve at \$10M in FY 21 growing to \$20M by FY 28
- \$600M IPR Placeholder for North & \$50M for South County for new water supply by FY 30
- Pacheco Reservoir
 - ▶ \$250M WIIN funding + WIFIA loan
 - Partner Agencies pay 20% of project
- Transfer-Bethany Pipeline + LVE
- South County Recharge
 - ► Timing = beyond FY 30
- \$200M warranty placeholder for dams & WTP's

Exceeds 80% LOS goal



* Includes but not limited to dam seismic retrofits, Rinconada WTP reliability improvement, 10-year pipeline rehabilitation program

Preliminary Groundwater Charge Increase Scenarios

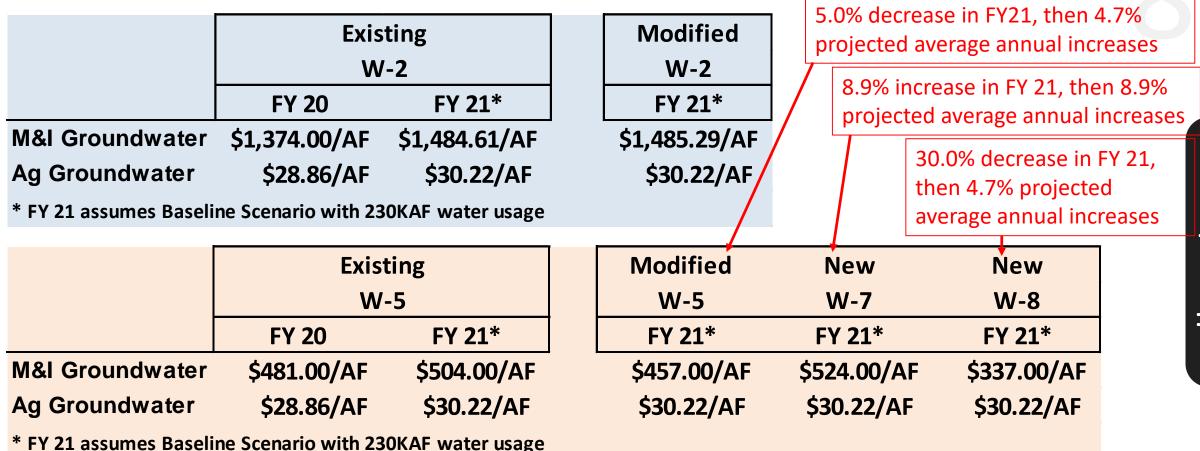
| No. County M&I Groundwater Charge Y-Y Growth % | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | FY 21 | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
| May 2019 | 6.6% | 6.6% | 6.6% | 6.6% | 6.6% | 6.6% | 6.6% | 6.6% | 6.6% | |
| Baseline | 6.5% | 6.5% | 6.5% | 6.5% | 6.5% | 6.5% | 6.5% | 6.5% | 6.5% | 6.5% |
| I) Baseline - Wtr Use at 230KAF | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% |
| B) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW Srchrg | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% | 8.4% |
| B) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW, + CVP | 8.6% | 8.6% | 8.6% | 8.6% | 8.6% | 8.6% | 8.6% | 8.6% | 8.6% | 8.6% |
| s) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% | 8.0% |
| 5) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + LVE | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% | 8.1% |
|) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$200M | 8.5% | 8.5% | 8.5% | 8.5% | 8.5% | 8.5% | 8.5% | 8.5% | 8.5% | 8.5% |
| 3) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$650M | 9.6% | 9.6% | 9.6% | 9.6% | 9.6% | 9.6% | 9.6% | 9.6% | 9.6% | 9.6% |
| So. County M&I Groundwater Charge Y-Y Growth % | FY 21 | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
| May 2019 | 6.9% | 6.9% | 6.9% | 6.9% | 6.9% | 6.9% | 6.9% | 6.9% | 6.9% | 1130 |
| Baseline | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% |
| L) Baseline - Wtr Use at 230KAF | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% | 4.7% |
| B) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW Srchrg | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% | 5.1% |
| 4) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW, + CVP | 5.3% | 5.3% | 5.3% | 5.3% | 5.3% | 5.3% | 5.3% | 5.3% | 5.3% | 5.3% |
| 5) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% |
| s) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + LVE | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% |
|) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$200M | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% | 5.0% |
| B) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$650M | 5.6% | 5.6% | 5.6% | 5.6% | 5.6% | 5.6% | 5.6% | 5.6% | 5.6% | 5.6% |
| | | | | | | | | | | |

Preliminary Monthly Impact to Average Household Scenarios

| No. County M&I Groundwater Charge Impact to Avg. Household | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| | FY 21 | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
| May 2019 | \$3.13 | \$3.33 | \$3.55 | \$3.78 | \$4.03 | \$4.30 | \$4.58 | \$4.89 | \$5.21 | |
| Baseline | \$3.08 | \$3.28 | \$3.49 | \$3.72 | \$3.96 | \$4.21 | \$4.49 | \$4.78 | \$5.09 | \$5.42 |
| 1) Baseline - Wtr Use at 230KAF | \$3.83 | \$4.14 | \$4.48 | \$4.84 | \$5.23 | \$5.66 | \$6.12 | \$6.61 | \$7.15 | \$7.73 |
| 3) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW Srchrg | \$3.97 | \$4.31 | \$4.67 | \$5.06 | \$5.49 | \$5.95 | \$6.45 | \$6.99 | \$7.58 | \$8.21 |
| 4) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW, + CVP | \$4.07 | \$4.42 | \$4.80 | \$5.21 | \$5.66 | \$6.15 | \$6.68 | \$7.25 | \$7.87 | \$8.55 |
| 5) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP | \$3.79 | \$4.09 | \$4.42 | \$4.77 | \$5.15 | \$5.56 | \$6.01 | \$6.49 | \$7.01 | \$7.57 |
| 6) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + LVE | \$3.83 | \$4.14 | \$4.48 | \$4.84 | \$5.23 | \$5.66 | \$6.12 | \$6.61 | \$7.15 | \$7.73 |
| 7) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$200M | \$4.02 | \$4.36 | \$4.74 | \$5.14 | \$5.57 | \$6.05 | \$6.56 | \$7.12 | \$7.73 | \$8.38 |
| 8) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$650M | \$4.54 | \$4.98 | \$5.46 | \$5.98 | \$6.55 | \$7.18 | \$7.87 | \$8.63 | \$9.46 | \$10.37 |
| | | | | | | | | | | |
| So. County M&I Groundwater Charge impact to Avg. Household | | | | | | | | | | |
| | FY 21 | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 |
| May 2019 | \$1.14 | \$1.22 | \$1.31 | \$1.40 | \$1.49 | \$1.60 | \$1.71 | \$1.82 | \$1.95 | |
| Baseline | \$0.78 | \$0.82 | \$0.85 | \$0.89 | \$0.94 | \$0.98 | \$1.03 | \$1.07 | \$1.12 | \$1.18 |
| 1) Baseline - Wtr Use at 230KAF | \$0.78 | \$0.82 | \$0.85 | \$0.89 | \$0.94 | \$0.98 | \$1.03 | \$1.07 | \$1.12 | \$1.18 |
| 3) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW Srchrg | \$0.84 | \$0.89 | \$0.93 | \$0.98 | \$1.03 | \$1.08 | \$1.14 | \$1.20 | \$1.26 | \$1.32 |
| 4) Baseline - Wtr Use at 230KAF, No WIIN, Rvsd PW, \$200 TW, + CVP | \$0.88 | \$0.92 | \$0.97 | \$1.03 | \$1.08 | \$1.14 | \$1.20 | \$1.26 | \$1.33 | \$1.40 |
| 5) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP | \$0.83 | \$0.87 | \$0.91 | \$0.96 | \$1.01 | \$1.06 | \$1.11 | \$1.17 | \$1.22 | \$1.28 |
| 6) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + LVE | \$0.83 | \$0.87 | \$0.91 | \$0.96 | \$1.01 | \$1.06 | \$1.11 | \$1.17 | \$1.22 | \$1.28 |
| 7) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$200M | \$0.83 | \$0.87 | \$0.91 | \$0.96 | \$1.01 | \$1.06 | \$1.11 | \$1.17 | \$1.22 | \$1.28 |
| 8) Baseline - Wtr Use at 230KAF, Rvsd PW, \$200 TW, + CVP + \$650M | \$0.93 | \$0.98 | \$1.03 | \$1.09 | \$1.15 | \$1.22 | \$1.29 | \$1.36 | \$1.43 | \$1.51 A |



How does the preliminary analysis translate to New and Modified Zones?



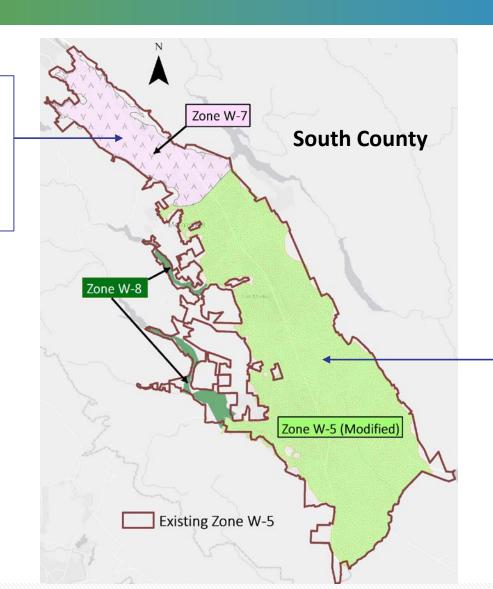
Ag groundwater charge remains consistent between Existing and Modified zones to align with Board direction to maintain Open Space Credit policy as is through FY 21



What is driving cost allocations between New and Modified Zones?

Zone W-7

- 22% of water use
- 56% of CVP, Anderson & Pacheco water distributed for groundwater recharge



Zone W-5

- 76% of water use
- 44% of CVP, Anderson & Pacheco water distributed for groundwater recharge



| Jan 14 | Board Meeting: Preliminary Groundwater Charge Analysis |
|-----------|---|
| Jan 15 | Water Retailers Meeting: Preliminary Groundwater Charge Analysis |
| Jan 22 | Water Commission Meeting: Prelim Groundwater Charge Analysis |
| Jan 28 | Board Meeting: Preliminary Groundwater Charge Analysis Continued |
| Feb 11 | Board Meeting: Budget development update & Set time & place of Public Hearing |
| Feb 28 | Mail notice of public hearing and file PAWS report |
| Mar 18 | Water Retailers Meeting: FY 19 Groundwater Charge Recommendation |
| Mar 24 | Board Meeting: Budget development update |
| Mar 31 | Landscape Committee Meeting |
| Apr 6 | Ag Water Advisory Committee |
| Apr 8 | Water Commission Meeting |
| Apr 14 | Open Public Hearing |
| Apr TBD | Continue Public Hearing in South County |
| Apr 28 | Conclude Public Hearing |
| Apr 29-30 | Board Meeting: Budget work study session |
| | |



Summary

Scenario 1 with reduced water usage plus additional scenarios range from 8.1% to 9.6% annual increases in North County M&I groundwater charge, & 4.7% to 5.6% in South County

 Potential FY 21 increase ranges from \$3.83 to \$4.54 per month for the average household in North County, and \$0.78 to \$0.93 per month in South County

 Board direction to be incorporated into Report on Protection and Augmentation of Water Supplies (PAWS) scheduled for February 28, 2020





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- Transfer-Bethany Pipeline
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2) Baseline + No WIIN Funding

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Exceeds 80% LOS goal



Delta Conveyance Project

Status:

- Technical analysis is proceeding to refine project design
- Bureau of Reclamation has not indicated degree to which it will support Central Valley Project (CVP) participation
- Staff anticipates re-initiation of negotiations to amend State Water Project (SWP) contract to include Delta Conveyance project in late January 2020

Cost Estimate:

| \$M | FY 21 | FY 22 | FY 23 | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | Included in |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|
| Gap Funding | 7.8 | 7.8 | 3.9 | | | | | | | | "Baseline" scenario |
| SWP 2.4% (State Side) | | | | 1.1 | 2.4 | 3.3 | 4.5 | 6.4 | 8.4 | 10.3 | |
| SWP 3.2% (CVP side) | | | | 1.4 | 3.1 | 4.2 | 5.8 | 8.2 | 10.7 | 13.2 | _ |
| Total | 7.8 | 7.8 | 3.9 | 2.5 | 5.5 | 7.5 | 10.3 | 14.7 | 19.1 | 23.6 | |

- No new project costs have been provided, cost estimates based on prior year information adjusted for timing
- Gap Funding based on 5.6% of \$350M spread over 2.5 years

